

Supporting Information:

Enhancing the Performance of Catalytic AuPt Nanoparticles in Non-aqueous Lithium-Oxygen Batteries

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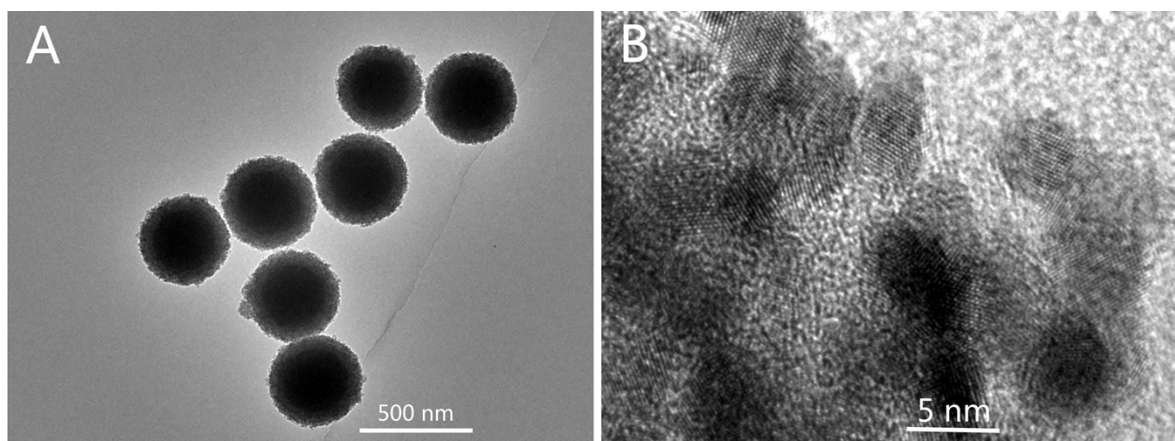


Fig. S1. (A) TEM image of as-synthesized silica particles with a mesoporous shell. (B) High resolution TEM image of AuPt/HMCMS composite catalyst.

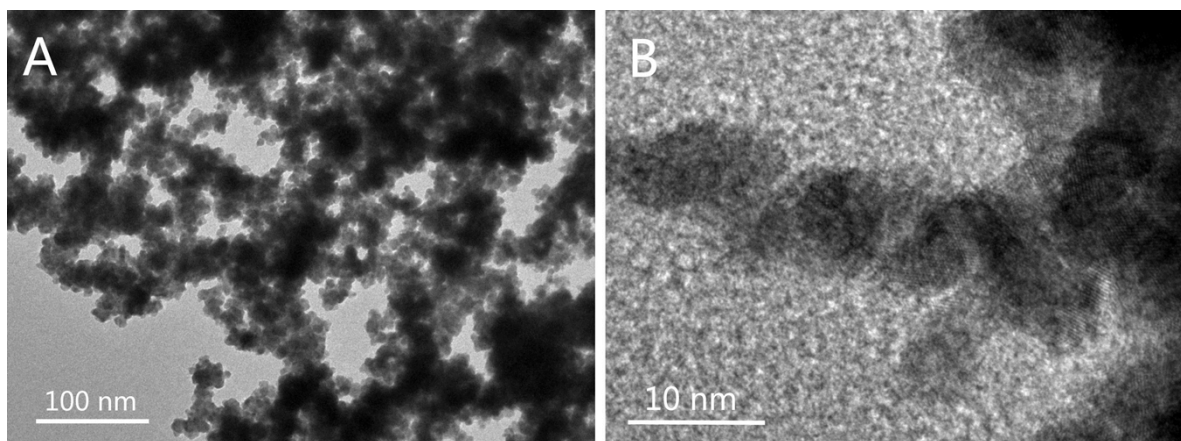


Fig. S2. TEM images of unsupported AuPt NPs.

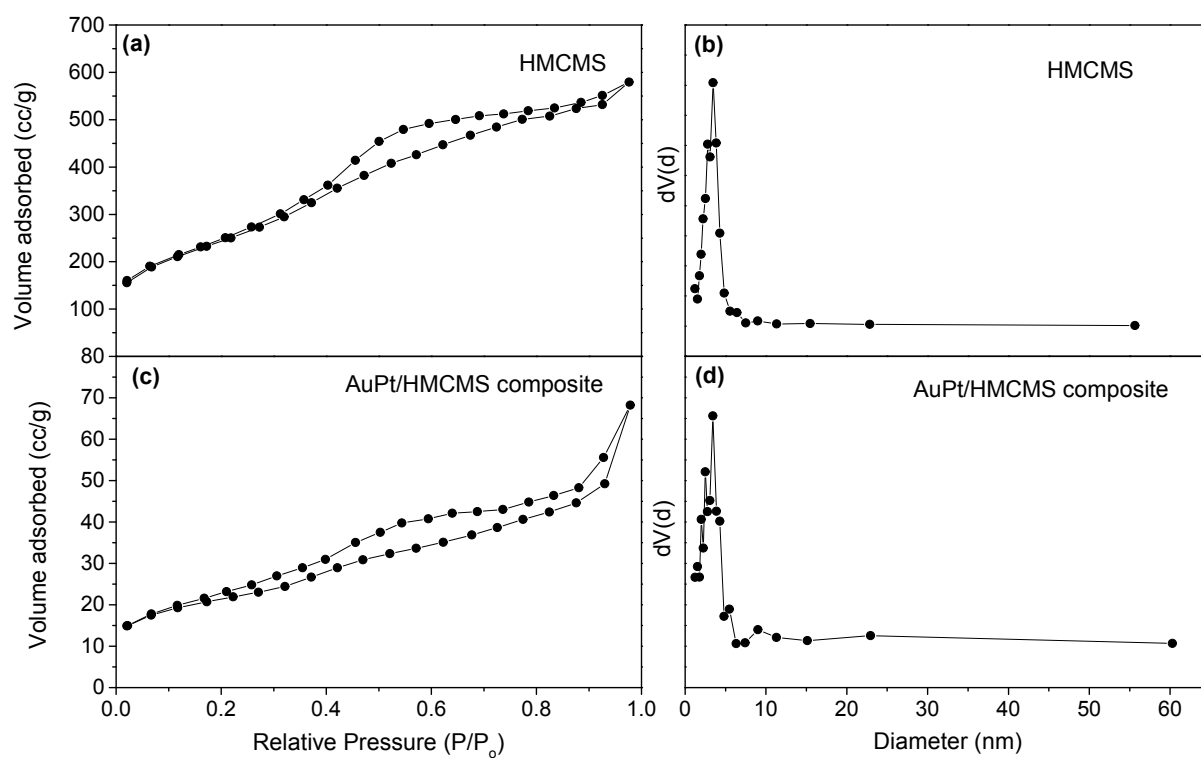


Fig. S3. Nitrogen adsorption–desorption isotherms of (a) HMCMS and (c) AuPt/HMCMS composite and pore size distribution of (b) HMCMS and (d) AuPt/HMCMS composite.

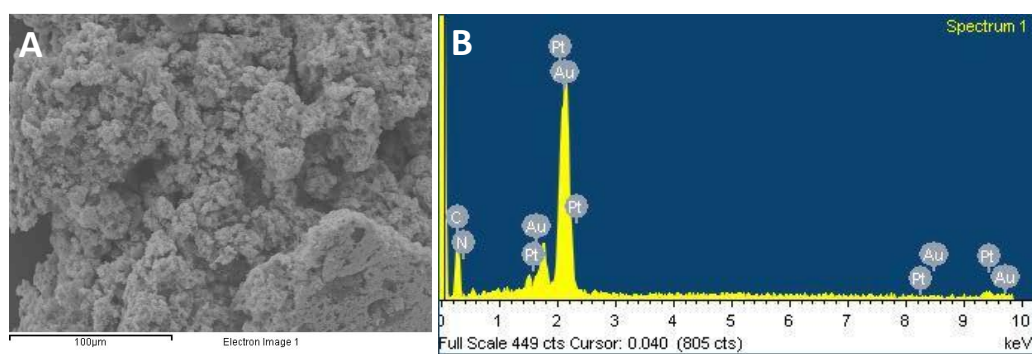


Fig. S4. (A) Low magnification ($\times 500$) SEM image of AuPt/HMCMS; (B) EDX spectrum of A.

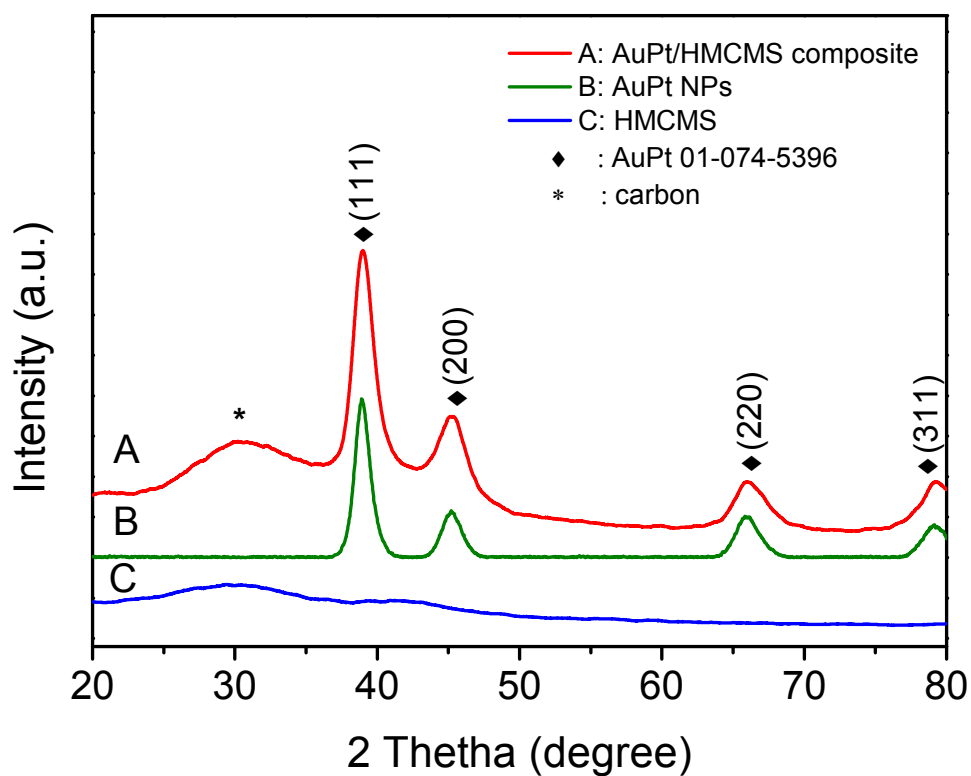


Fig. S5. XRD patterns of HMCMS, AuPt NPs and AuPt/HMCMS composite.

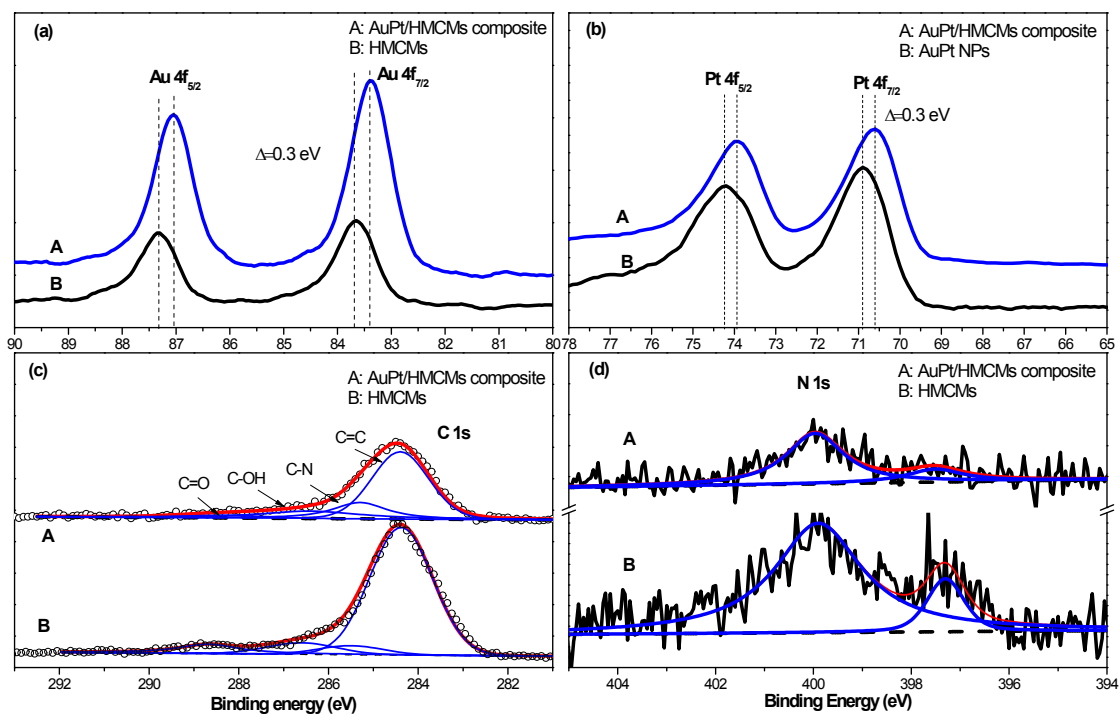


Fig. S6 High resolution XPS spectra of AuPt/HMCMS, AuPt NPs and HMCMS in the (a) Au 4f; (b) Pt 4f; (c) C 1s and (d) N 1s regions.

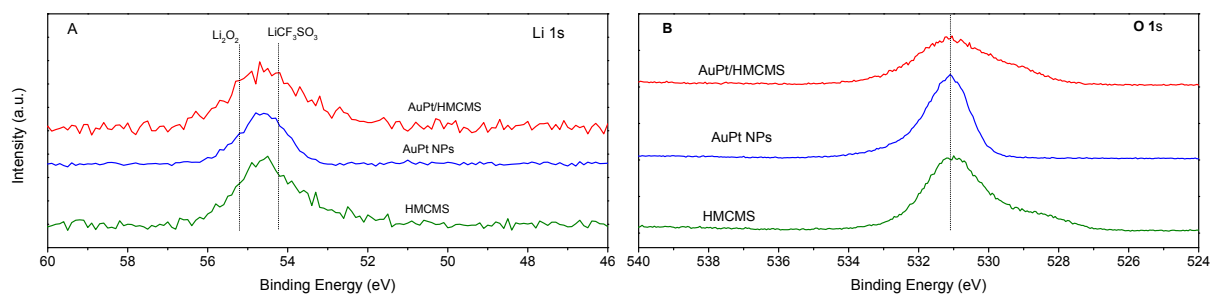


Fig. S7. High resolution XPS spectra of electrodes after 1st discharge. (A) Li 1s region; (B) O 1s region.